Wisconsin Bureau of Health Information and Policy

Physician Office Visit (POV) Data

Wisconsin Physician Office Visit

Data User Guide: Public Use Data Files

Release number: 2.0 (2005-05-12)



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May 2005

Bureau of Health Information and Policy Division of Public Health Wisconsin Department of Health and Family Services

Foreword

The Wisconsin Physician Office Visit Data User Guide: Public Use Data Files provides in-depth details for the data elements included in these files as well as the data collection process for the Wisconsin Physician Office Visit (POV) data system. This document was produced by the Bureau of Health Information and Policy (BHIP), Division of Public Health, Wisconsin Department of Health and Family Services.

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This publication is available on the Wisconsin Department of Health and Family Services site:

http://dhfs.wisconsin.gov/healthcareinfo/pov/datarelease.htm

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Introduction

The Wisconsin Physician Office Visit (POV) data program involves dynamic data exchange and data retention activities between the Bureau of Health Information and Policy (BHIP) and physicians or their delegates. One of the program's major objectives is to create standard datasets that can be used to understand health care services rendered in an outpatient office setting. The system also permits analysis of charges and volume of services by plan, physician specialty, and geographic locale; the distribution of diseases and procedures across patient demographics; and practice patterns across care settings and physicians.

Authority

Under the provisions of Chapter 153, Wisconsin Statutes, and HFS 120, Wisconsin Administrative Code, the Department of Health and Family Services (DHFS) is charged with the responsibility for the collection, analysis and dissemination of health care data. This statute mandates DHFS to expand its data collection efforts to include information reflecting health care and services delivered in physician offices on an outpatient basis. DHFS assigned the responsibility for administering the POV data collection program to the Bureau of Health Information and Policy (BHIP), with the Board on Health Care Information providing oversight jointly with the Department.

Chapter 153 provides comprehensive guidelines for health care data collection, information dissemination, report analysis, and confidentiality protection. HFS 120.14 provides details pertaining to the POV data collection program, such as data elements to be collected and released, verification processes, and adjustment methods. Chapter 153, Wisconsin Statutes, is available at: http://www.legis.state.wi.us/rsb/stats.html. HFS 120, Wisconsin Administrative Code, is available at: http://www.legis.state.wi.us/rsb/code/index.html.

Overview of the POV Public Use Data Files

Within each reporting period, physicians or their delegated data submitters submit information on services provided by physicians in an office setting. Following a data quality assessment and improvement process, BHIP creates public use data files and custom data files and reports.

The majority of data contents and specifications in the public use data files are consistent with the original data elements defined in the POV Data Submission Manual. Regulations and data standards set forth in the Health Insurance Portability and Accountability Act (HIPAA) of 1996 are followed to protect patient privacy and confidentiality. HIPAA requirements supersede state law unless state law is more stringent. In fact, Wisconsin has set more restricted regulations and standards for protecting patient privacy and confidentiality than

did HIPAA. POV is designed to comply with all HIPAA and Wisconsin requirements related to patient confidentiality.

Although BHIP's standard public use data files will meet many users' information needs, some people will require additional information or information configured differently. BHIP will work with requestors to help define their needs and develop appropriate customized data files and reports.

The public use data files provide information about the most frequent outpatient procedures and associated charges. In combination with information from other health care providers, the data will provide an opportunity to better understand and improve the health status of Wisconsin communities, the operation of the health care system and the health care decisions made by consumers, policymakers and purchasers.

The POV public use data files may also provide insights to providers about practice patterns; enable health care purchasers to conduct market analyses; and help policymakers learn more about the health status and health care utilization of Wisconsin citizens. Expanded and innovative uses of the POV data will emerge as data users gain knowledge and experience with the new information.

Data Release Schedule

The POV Public Use Data Files are created based on reporting years and periods. Details of the data release schedule and timeline are provided in the "Reporting and Release Date" discussion of the "Data Collection and Release" section.

Independent Review Board

Chapter 153.67, Wisconsin Statutes, creates an Independent Review Board (IRB), members of which are appointed by the Governor. The IRB must review and approve requests for the release of physician office visit data that exceed what is permitted in the public use data file. Data elements that the IRB may decide to add to the public use data files include physician identification and practice type. Data elements that may only be released after a case-by-case IRB review and approval include patient zip code of residence, patient age, and patient birth month or year.

Disclaimer

POV data collection does not yet represent the universe of all physicians in Wisconsin or all services delivered by physicians. Therefore, POV data should not be used to make inferences regarding the entire Wisconsin population of either physicians or residents.

Contact Information

BHIP welcomes any suggestions to improve this User Guide and the POV Public Use Data Files. Your comments and suggestions will make the POV system better and easier to use.

E-mail: povdata@dhfs.state.wi.us

Mailing address:

Physician Office Visit Data Collection Bureau of Health Information and Policy Division of Public Health Department of Health and Family Services P.O. Box 309 Madison, WI 53701-0309

Although BHIP will make every effort to notify all data users of any updates to the User Guide, users should periodically check for new information online. For the latest revision and updates to this guide, please visit the Web site at: http://dhfs.wisconsin.gov/healthcareinfo/pov/index.htm

Data Collection and Release

The POV data program collects a diverse range of information on services delivered by licensed physicians practicing in a Wisconsin office setting.

Scope

Reportable physician office visit data include all procedures or services provided by Wisconsin physicians on an outpatient basis. Physicians are licensed medical professionals who hold one of two types of licenses from the State of Wisconsin:

- Doctor of Medicine
- Doctor of Osteopathy

Outpatient office settings include, but are not limited to, locations where place-ofservice codes, as defined by the Centers for Medicare and Medicaid Services, are:

- 11 (office visit)
- 22 (outpatient hospital)
- 25 (birth center)
- 26 (military treatment facility)
- 31 (skilled nursing facility)
- 32 (nursing facility)
- 33 (custodial care facility)
- 34 (hospice)
- 50 (federally qualified health center)
- 53 (community mental health center)
- 60 (mass immunization center)
- 62 (comprehensive outpatient rehabilitation facility)
- 71 (state or local public health clinic)
- 72 (rural health clinic)

Each POV record reports one charge for one procedure or service performed by a physician. If multiple procedures are performed by a physician for one patient on the same day, then a POV record for each charge/service/procedure is submitted and BHIP stores it in the data files.

The public use data for Reporting Years 2003 and 2004 consist only of service information reported by 8,500 physicians from the 13 large health care organizations participating in the current phase of data collection.

Reporting and Release Dates

The physician office visit service records submitted for each reporting period are for those reportable physician office visit services for which the "posting"

date" plus 60 calendar days falls within the reporting period. In other words, the posting date is used to determine whether a record should be included in a specific reporting year and period, rather than the date a patient's visit to a physician takes place (i.e., service date).

The data submission deadline for a physician visit depends on the *posting date* of the patient's charges for that visit. *Posting date* is the date of posting the patient's charges into the provider's accounting books (electronic charge-based data system). The data submission deadline will fall according to the "posting + 60 calendar days" guideline. For POV data submission, the *posting date* plus 60 calendar days is the *data maturity date*.

For instance, a patient sees his/her physician on March 12. The *posting date* is April 17. Adding 60 calendar days to the *posting date* means the *data maturity date* is June 15. June 15 falls into the second quarter, making the data reportable for the second quarter and due on July 31. Thus, due to the use of the *posting date*, it is possible for the date of service of a record to occur sometime before the reporting year and period in which it is submitted.

A general timeline of data submission and release is listed by each reporting period as follows:

		Data Submission	Anticipated Data
Period	Date	Deadline	Release Date
1	1/1 - 3/31	4/30	7/1
2	4/1 - 6/30	7/30	10/1
3	7/1 - 9/30	10/30	1/3
4	10/1- 12/31	1/30	5/1

Table 1. Data Processing and Release Timelines

Data Definition Standards

The POV data collection program adopts the element and transaction standards specified in the Health Insurance Portability and Accountability Act of 1996 (HIPAA). More specifically, because of outpatient service characteristics, the POV data standards are mainly based on the implementation guide for the ANSI ASC X12N 837 Health Care Claims (837) transaction for professional claims and/or encounters. The requirements and specifications of the data standards adopted include data definitions, component structures and types, code values, and data use.

Data Processing and Quality

HFS 120, Wis. Admin. Code, requires the Department to "check the accuracy and completeness of all submitted data." Physicians licensed by and practicing in the State of Wisconsin and using electronic billing are required to submit their outpatient service data for each reporting period, although physicians may transfer data submission responsibility to qualified submitter/vendor organizations. All of the clinic or medical groups in the current phase of POV data collection have agreed to accept data submission responsibility for their physicians.

Under the statute, the submitted POV data contents must be examined and verified through data editing and affirmation processes. The data verification process occurs in three stages: batch submission, data summary, and data affirmation.

Submission. When a POV data file is sent to BHIP, a series of standard processing reports is generated in response to any potential errors detected in the submitted file. Those reports provide feedback to data submitters on the quality and statistics of the submitted files and problematic records. The data submitters correct data errors in those problematic records, then re-submit them to BHIP for another verification process.

Data Summary. At the end of each data submission period, BHIP provides a set of data summary reports, consisting of all the remaining problematic data and records needed to be corrected in the reporting period. The physicians or their qualified submitters/vendors must correct the errors and complete resubmission within 15 days of receipt of the data summary reports.

Data Affirmation. After completion of the data summary process, a final physician data profile report is generated for each physician who submitted data, along with an affirmation statement. A physician is required to affirm that, to the best of the physician's or her/his delegated designee's knowledge, the POV data summarized in the profile, together with any corrections, additions, or deletions that were subsequently made, are complete and accurate. In addition, each physician is given the opportunity to provide comments on her or his data to BHIP. In turn, BHIP will include a file of any physician comments received with the public use data files.

Releasable Elements in Public Use Data Files

This section provides users with the information about data elements and their specifications needed to understand the data in the POV Public Use Data Files.

Patient Confidentiality

Chapter 153, Wisconsin Statutes, restricts the collection or use of certain patient data elements, specifically those related to employment, date of illness and zip code of residence; and provides sanctions for the inappropriate use of BHIP data. The Department of Health and Family Services, in cooperation with the Independent Review Board, is required to protect the identity of patients, patients' employers, and health care providers in the POV Public Use Data Files, by all necessary means, including the following:

- Not releasing patient identifiers.
- Using calculated and aggregate variables.
- Specifying counties of residence rather than zip codes.
- Using 5-year categories for age rather than exact age.
- Not releasing information with exact service dates (e.g., admission, discharge, and procedure dates).
- Masking sensitive diagnoses and procedures and grouping specific diagnoses and procedures into larger categories.

An overview of the collected data elements and how they may be released is summarized in Table 2. Public use data are not released until physicians or their delegated designees have affirmed that the data are accurate and complete.

Data That Can Be Released

Criteria for selecting the data elements to be included in the POV Public Use Data Files are promulgated in s.153.45(1), Wis. Stats., "Release of data," and HFS 120.31(3), Wis. Admin. Code, "Data dissemination." The public use data files are designed to provide general health care information to a wide spectrum of users. It is essential for the Department to ensure that individual patients cannot be *directly or indirectly* identified from the files.

The contents of releasable data elements are provided in either an original format or a calculated-variable format, depending on statutory requirements. The calculated-variable format is used to protect patient confidentiality and anonymity when a data element may contain individual-level identifiable or sensitive information. The value of the calculated variable is computed from an original data item or derived from another data source.

The POV data file available for public use includes the following information for each physician-provided service: procedure code, diagnosis codes, charges, payer type, patient's age group, patient's sex, patient's county of residence, practice site, and calendar quarter. More specifically, s.153.45(1)(b)2, Wis. Stats., stipulates that the POV Public Use Data Files may include only:

- a. The patient's county of residence.
- b. The payment source, by type.
- c. The patient's age category, by 5-year intervals.
- d. The patient's procedure code.
- e. The patient's diagnosis code.
- f. Charges assessed with respect to the procedure code.
- g. The name and address of the facility in which the patient's services were rendered.
- h. The patient's sex.
- i. Information that contains the name of a health care provider that is not a hospital or ambulatory surgery center, if the Independent Review Board first reviews and approves the release or if the Department promulgates rules that specify circumstances under which the Independent Review Board need not review and approve the release.
- j. Calendar quarter of service, except if the Department specifies by rule that the number of data elements included in the public use data file is too small to enable protection of patient confidentiality.
- k. Information other than patient-identifiable data, as defined.

The POV Public Use Data Files consist of only a subset of the submitted data elements in POV records. Nevertheless, there are additional data elements allowed to be released with approval of the Independent Review Board (IRB). Comprehensive details of data elements collected in POV data collection can be found in the "POV Service Data" section of the POV Data Submission Manual. For the latest revision and updates to the POV Data Submission Manual, please visit the DHFS Web site at:

http://dhfs.wisconsin.gov/healthcareinfo/pov/index.htm

Table 2 is a list of POV data elements and how they may be released. "Released in Public Use Files" indicates that the corresponding element is included in the POV Public Use Data Files. "May Be Released with IRB Approval" specifies that the corresponding element can be acquired upon IRB approval. "Not Releasable" data elements are not permitted to be released to the public, but are used to identify records to data submitters during quality editing and correcting.

Table 2. Overview of POV data elements and how they may be released.

Element/Subset Name	Released in Public Use Files	May Be Released with IRB Approval	Not Releasable
Physician affiliated organization		rr · · · ·	
Organization ID	•		
Organization name	•		
Employer identification number (EIN)			•
Physician's name and identification			
Name (last, first, middle, suffix)		•	
Wisconsin physician license number		•	
License status		•	
Physician specialty	•		
National provider identifier (NPI)		•	
EIN		•	
UPIN		•	
Clinic or service facility information			
Facility name	•		
Facility type		•	
Street address 1	•		
Street address 2	•		
City name	•		
State code	•		
Zip code	•		
Patient information			
Birth date			•
Age in years		•	
Age group	•		
Gender	•		
Zip code of residence		•	
Pseudo provider patient identifier	•		
Pseudo common patient identifier	•		
County of residence	•		
Payer information			
Primary payer category	•		
Secondary payer category	•		
Visit			
Pseudo visit identifier	•		

(Continued)

Table 2 (Continued...)

Table 2 (Continued)			
Element/Subset Name	Released in Public Use Files	May Be Released with IRB Approval	Not Releasable
Diagnoses			
Diagnosis 1 (Principal diagnosis)	•		
Diagnosis 2	•		
Diagnosis 3	•		
Diagnosis 4	•		
Diagnosis 5	•		
Diagnosis 6	•		
Diagnosis 7	•		
Diagnosis 8	•		
Service date and location			
Date of service		•	
Service year	•		
Service quarter	•		
Place of service		•	
Procedure and modifier			
Procedure code	•		
Modifier 1		•	
Modifier 2		•	
Modifier 3		•	
Modifier 4		•	
Procedure charges information			
Days or units basis type		•	
Quantity		•	
Procedure charges	•		
Total charge in a claim		•	
Whether the provider accepts assignment			
Assignment in general		•	
Medicare assignment		•	
Outside lab information			
Tests were sent to an outside lab		•	
Outside lab charges		•	
Patient condition related to employment, auto accident, or other accident			

(Continued)

Table 2 (Continued...)

		May Be	•
	Released	Released	
DI AG I AN	in Public	with IRB	Not
Element/Subset Name	Use Files	Approval	Releasable
Condition Related Cause 1		•	
Condition Related Cause 2		•	
Condition Related Cause 3		•	
Whether a patient is pregnant		•	
Date of current illness, injury, or pregnancy			
Onset of current symptom/illness		•	
Date of accident		•	
Date of last menstrual period		•	
Referring physician information			
Name (last, first, middle, suffix)		•	
NPI		•	
EIN		•	
UPIN		•	
Service billing information			
Name of individual/organization		•	
Individual/organization indicator		•	
Street address 1		•	
Street address 2		•	
City name		•	
State code		•	
Zip code		•	
NPI		•	
EIN		•	
UPIN		•	
Encrypted case identifier			•
Patient control or account number			•
Medical record or chart number			•
Prior authorization number			•

Data in Standard Edition Public Use File

The *Standard Edition* public use data file is a basic product that contains only non-confidential data elements with general-level information. The location of

residence and exact age of a patient are replaced by calculated variables, county of residence and age group, respectively.

Below is a list of data elements provided in the Standard Edition public use data file. Details of each element are described in the *Data Element Specifications* section.

- POV record ID
- Patient's gender
- Patient's age group
- Patient's county of residence
- Primary payer category code
- <u>Secondary payer category code</u>
- Service year
- <u>Service quarter</u>
- Diagnosis 1 (Principal)
- Diagnoses 2 8
- Procedure code
- Procedure charge amount
- Facility name
- Facility street address 1
- Facility street address 2
- Facility city name
- Facility state code
- Facility ZIP code
- Comment

If you do not have an Enhanced Edition public use data file, please stop here and skip the next sub-section, "Data in Enhanced Edition Public Use File."

Data in Enhanced Edition Public Use File

Although the Standard Edition POV public use data file provides essential knowledge of service payers, medical procedures, and charges rendered in outpatient office settings, it does not contain information enabling health research or epidemiological analyses regarding patients, visits, or provider specialty on a population basis.

In response to public health research needs, the *Enhanced Edition* POV public use data files include four additional calculated variables, including two calculated patient variables, a calculated visit variable, and a physician specialty variable. All of the data elements in the Standard Edition POV public use data file are also included in the Enhanced Edition public use data file.

The additional data elements included in the Enhanced Edition public use data file are:

- POV visit ID
- Provider patient ID
- Common patient ID
- Physician specialty code

Details of each element in the Enhanced Edition public use data file are included in the *Data Element Specifications* section.

Data Element Specifications

Contents of Specifications

This subsection specifies the characteristics and contents of data elements in the POV Public Use Data Files. Data element specifications are organized in order of elements that are present on a record. Each data element is defined in detail on a data element specification sheet. The format for the specification sheets is illustrated in the following example:

• Product: The data file edition that contains this data element.

• Element Name: The name of the data element assigned in Chapter 153,

Wisconsin Statutes. It is always listed at the top of the

specification sheet.

• Subset Number: Every data element is assigned a unique subset number

for identification and editing purposes during the data submission process. The subset number allows the user to track this element back to the corresponding data element in the POV Data Submission Manual

element in the POV Data Submission Manual.

• Variable Name: An extended identification for data elements used in the

POV Public Use Data Files.

• Definition: A narrative statement that defines the data element.

• Type: The characteristic feature of an element. Data element

types include:

□ Numeric: A numeric element consisting of one or

more digits representing a value in the normal base of 10. The value of a numeric element may include a decimal point. The abbreviation for this data

element type is "Num."

□ String: A string data element can be one (stand-

alone) character or a sequence of any characters. Character strings are leftjustified without leading spaces. The abbreviation for this data element type is

"Str."

Length: The character length of each data element. The length is

> the number of character positions used. Based on the nature of an element, each of the data elements is assigned a pre-specified length, with a maximum length

if necessary.

Value: Sample code used for a data element, and definitions

corresponding to the code.

Specification: More detailed information for the data element, such as

sources, applicability, code setting, and so forth.

Data Element Specifications

POV Record ID

Standard and enhanced editions Product:

Subset Number: 8010 (calculated variable)

Variable Name: pov_record_id

Definition: A unique record identification number provided by

BHIP for each released record.

Type: String

Length: 7-13 positions Value: 0315011234567

- Specifications: 1. Each released record is assigned a unique record identification string by BHIP after being affirmed by a physician or data submitter.
 - 2. The first two (2) positions represent the reporting year in a two-digit format.
 - 3. The third position indicates the reporting period of the affirmed record.
 - 4. The fourth, fifth, and sixth positions consist of a submitter ID number indicating the record source of origin.
 - ID Name
 - 501 Dean Health System
 - UW Medical Foundation 502
 - 503 The Marshfield Clinic
 - 504 Gundersen Clinic, LTD
 - 505 Aurora Health Care
 - 506 Covenant Heath Care Systems Inc
 - Medical College of Wisconsin 507
 - Beloit Clinic, S.C. 508

Group Health Cooperative of South Central Wisconsin
 Mercy Health System
 Luther Midelfort – Mayo Health System
 ThedaCare Health Systems
 Franciscan Skemp Healthcare

5. The rest of the fields consist of a series of randomgenerated alphanumeric characters up to 7 positions.

Patient Gender

Product: Standard and enhanced editions

Subset Number: 3060

Variable Name: Patient_sex_code

Definition: A code that indicates the gender or sex of the patient.

Type: String
Length: 1 position

Value: Code Definition

M Male F Female U Unknown

Specifications: 1. Whenever the diagnosis or procedure is gender-

specific, the gender code must be consistent with the annotations to the diagnostic and procedure

codes.

Patient Age Group

Product: Standard and enhanced editions

Subset Number: 3050-AG (calculated variable)

Variable Name: patient_age_group_code

Definition: The patient's age category, by 5-year intervals.

Type: String

Length: 2 positions or fewer

Value:	Code	<u>Definition</u>	Code	<u>Definition</u>
	1	≤ 5 years old	11	51 - 55 years old
	2	6 - 10 years old	12	56 - 60 years old
	3	11 - 15 years old	13	61 - 65 years old
	4	16 - 20 years old	14	66 - 70 years old
	5	21 - 25 years old	15	71 - 75 years old
	6	26 - 30 years old	16	76 - 80 years old
	7	31 - 35 years old	17	81 - 85 years old
	8	36 - 40 years old	18	86 - 90 years old
	9	41 - 45 years old	19	91 - 95 years old
	10	46 - 50 years old	20	\geq 96 years old

- Specifications: 1. The actual age of a patient is not allowed to be released, to protect patient confidentiality. As a result, the patient's age is redefined in a calculated variable format, by 5-year categories.
 - 2. The age value is based on the patient's age when a medical service is rendered.

Patient County of Residence

Product: Standard and enhanced editions

Subset Number: 3070-CTY (calculated variable)

Variable Name: patient_county_code

Definition: A code used to indicate the county where the patient

resides.

Type: String

Length: 3 positions

Lengin.	5 positi	10113		
Value:	Code	Definition	<u>Code</u>	Definition
	001	Adams	073	Marathon
	003	Ashland	075	Marinette
	005	Barron	077	Marquette
	007	Bayfield	078	Menominee
	009	Brown	079	Milwaukee
	011	Buffalo	081	Monroe
	013	Burnett	083	Oconto
	015	Calumet	085	Oneida
	017	Chippewa	087	Outagamie
	019	Clark	089	Ozaukee
	021	Columbia	091	Pepin
	023	Crawford	093	Pierce
	025	Dane	095	Polk

027	Dodge	097	Portage
029	Door	099	Price
031	Douglas	101	Racine
033	Dunn	103	Richland
035	Eau Claire	105	Rock
037	Florence	107	Rusk
039	Fond du Lac	109	St. Croix
041	Forest	111	Sauk
043	Grant	113	Sawyer
045	Green	115	Shawano
047	Green Lake	117	Sheboygan
049	Iowa	119	Taylor
051	Iron	121	Trempealeau
053	Jackson	123	Vernon
055	Jefferson	125	Vilas
057	Juneau	127	Walworth
059	Kenosha	129	Washburn
061	Kewaunee	131	Washington
063	La Crosse	133	Waukesha
065	Lafayette	135	Waupaca
067	Langlade	137	Waushara
069	Lincoln	139	Winnebago
071	Manitowoc	141	Wood

- Specifications: 1. The county code standards are adopted from Codes for Named Populated Places, Primary County Divisions, and Other Locational Entities of the United States, Puerto Rico, and the Outlying Areas, the Federal Information Processing Standards Publication 55-3 (FIPS PUB 55-3), and ANSI X3.47-1988, Information Systems - Codes - Structure and Data Requirements for the Identification of Named Populated Places, Primary County Divisions, and Other Locational Entities of the United States and Its Outlying and Associated Areas for Information Interchange.
 - 2. Since the first two digits of the county code in Wisconsin are always 55, only the last three digits of the county code are used to represent a county.
 - 3. The patient's county code of residence is derived

- from the zip code of the patient's residence. The actual zip code is not allowed to be released, to protect patient confidentiality.
- 4. Only counties in Wisconsin will be reported and provided in the data files.
- 5. Zip codes outside of Wisconsin will be converted to their state code, instead of a county code.
- 6. Zip codes which are unidentifiable or outside of the U.S. will be replaced by a pseudo county code ("000").

Primary Payer Category Code

Product: Standard and enhanced editions

Subset Number: 4010

Variable Name: primary_payer_category_code

Definition: Indicates the primary payer(s)' involvement with

and/or liability for this claim.

Type: String

Length: 2 positions

ZZ

engin.	2 positi	OliS
Value:	Code	<u>Definition</u>
	09	Self-pay
	10	Central Certification
	11	Other Non-Federal Programs
	12	Preferred Provider Organization (PPO)
	13	Point of Service (POS)
	14	Exclusive Provider Organization (EPO)
	15	Indemnity Insurance
	16	Health Maintenance Organization (HMO)
		Medicare Risk
	AM	Automobile Medical
	BL	Blue Cross/Blue Shield
	CH	Tricare/CHAMPUS
	CI	Commercial Insurance Company
	DS	Disability
	HM	Health Maintenance Organization
	LI	Liability
	LM	
	MB	Medicare Part B
	MC	Medicaid
	OF	Other Federal Program
	TV	Title V
		Veterans Administration Plan
	WC	Worker's Compensation Health Claim

Mutually Defined; Unknown

Specifications: 1. This element identifies the type of claim

submitted.

Secondary Payer Category Code

Product: Standard and enhanced editions

Subset Number: 4020

Variable Name: secondary_payer_category_code

Definition: Indicates the secondary payer(s)' involvement with

and/or liability for this claim.

Type: String

Length: 2 positions

Value: <u>Code</u> <u>Definition</u>

09 Self-pay

10 Central Certification

11 Other Non-Federal Programs

12 Preferred Provider Organization (PPO)

Point of Service (POS)

14 Exclusive Provider Organization (EPO)

15 Indemnity Insurance

Health Maintenance Organization (HMO)

Medicare Risk

AM Automobile Medical

BL Blue Cross/Blue Shield

CH Tricare/CHAMPUS

CI Commercial Insurance Company

DS Disability

HM Health Maintenance Organization

LI Liability

LM Liability Medical

MB Medicare Part B

MC Medicaid

OF Other Federal Program

TV Title V

VA Veterans Administration Plan

WC Worker's Compensation Health Claim

ZZ Mutually Defined; Unknown

Specifications: 1. This element identifies the type of claim

submitted.

Service Year

Product: Standard and enhanced editions

Subset Number: 5050-YY (calculated variable)

Variable Name: service_year

Definition: Year the service was rendered.

Type: Numeric Length: 4 positions Value: CCYY

Specifications: 1. The value in the service year field is represented

by a 4-digit year based on the ISO standard.

2. CC indicates the century of the service year. YY

indicates the 2-digit year of the century.

Service Quarter

Product: Standard and enhanced editions

Subset Number: 5050-QTR (calculated variable)

Variable Name: service_quarter

Definition: Quarter the service was rendered.

Type: Numeric Length: 1 position

Value: Code Definition

1 First Quarter (January, February, March)

2 Second Quarter (April, May, June)

Third Quarter (July, August, September)

4 Fourth Quarter (October, November,

December)

Specifications: 1. The value is calculated based on the data of

services performed.

Diagnosis Code 1

Product: Standard and enhanced editions

Subset Number: 5031

Variable Name: diagnosis_code1

Definition: Principal diagnosis code used to identify a diagnosed

medical condition based on the nature of a patient's

illness or injury.

Type: String

Length: 6 positions or fewer

Value: "7068" – Asteatosis; "75520" – Fibula hemimelia

Specifications: 1. Diagnoses should be coded according to the

International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM).

- 2. ICD-9-CM codes are composed of three-, four-, and five-digit codes.
- 3. When the principal diagnosis is gender- or agespecific, a patient's gender or age should be consistent with the ICD-9-CM code.

Diagnosis Codes 2-8

Product: Standard and enhanced editions

Subset Number: 5032 - 5038

Variable Name: diagnosis code2

diagnosis_code3 diagnosis_code4 diagnosis_code5 diagnosis_code6 diagnosis_code7 diagnosis_code8

Definition: Additional diagnosis code used to identify a

diagnosed medical condition based on the nature of a

patient's illness or injury.

Type: String

Length: 6 positions or fewer

Value: "7068" – Asteatosis; "75520" – Fibula hemimelia

Specifications:

- 1. Diagnoses should be coded according to the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM).
- 2. ICD-9-CM codes are composed of three-, four-, and five-digit codes.
- 3. When the principal diagnosis is gender- or agespecific, a patient's gender or age should be consistent with the ICD-9-CM code.

Procedure Code

Product: Standard and enhanced editions

Subset Number: 5070

Variable Name: procedure_code

Definition: Code describing a procedure performed for definitive

treatment or to treat a complication rather than for diagnostic, exploratory, or therapeutic purposes.

Type: String

Length: 5 position

Value: "97010" – Application of a modality to one or more

areas, hot or cold packs.

ecifications: 1. The value is assigned according to CPT-4/HCPCS

convention.

2. The procedure code is assessed based on the date

of the service performed.

Procedure Charges

Product: Standard and enhanced editions

Subset Number: 5110

Variable Name: procedure_charge_amount

Definition: The amount of charge related to a particular procedure

or service.

Type: Numeric

Length: 18 positions or fewer

Value: "123.45" is coded when a charge of \$123.45 is

indicated.

Specifications: 1. Two decimal places are required when the amount

of charge is not an even dollar amount.

2. Decimals after the second-decimal position are removed when the charge is loaded into the POV

database.

Facility Name

Product: Standard and enhanced editions

Subset Number: 5182

Variable Name: facility_name

Definition: The legal or corporate name of the facility where the

service was performed, used to distinguish one

business entity from another.

Type: String

Length: 95 positions or fewer

Value: BHIP Clinic – Capital Center

Specifications: 1. This element contains the name of the facility

where services were rendered.

2. A medical facility may be used by different

providers or affiliations.

Facility Address 1

Product: Standard and enhanced editions

Subset Number: 5191

Variable Name: facility_street_address_text

Definition: A single data element typically composed of the

following components: primary number, Pre-Directional, Street Name, Street Suffix, Post-Directional, Secondary Unit Indicator.

Type: String

Length: 55 positions or fewer

Value: "123 MAIN STREET" is coded when the street

address of the facility where service was rendered is

123 Main Street.

Specifications: 1. This field consists of the street address of the

facility where service was rendered.

Facility Address 2

Product: Standard and enhanced editions

Subset Number: 5192

Variable Name: facility_po_box_route_text

Definition: A single data element typically composed of one of

the following components: PO Box, Highway Contract Route, or Rural Route Number.

Type: String

Length: 55 positions or fewer

Value: "PO BOX 309" is coded when the address of the

facility where the service was performed is PO Box

309.

Specifications: 1. If both P.O. Box number and street address are

used, P.O. Box number must be placed in street

address 2

Facility City Name

Product: Standard and enhanced editions

Subset Number: 5193

Variable Name: facility_city_name

Definition: The name of the municipality associated with the

local post office for the address where the service was

rendered.

Type: String

Length: 52 positions or fewer

Value: "MADISON" is coded when a service was performed

in Madison, Wisconsin.

Specifications: 1. This element contains the name of the city where

the facility in which the service was rendered is

located.

Facility State Code

Product: Standard and enhanced editions

Subset Number: 5194

Variable Name: facility_state _code

Definition: The state code of facility where the service is

rendered.

Type: String

Length: 2 positions

Value: "WI"

Specifications: 1. Since POV data collection only involves services

rendered in Wisconsin, the state code of the facility where the service is rendered must be

"WI."

2. The state code is used to identify one of the 50

U.S. states as defined by the Federal Information

Processing Standard for Codes for the Identification of the States, the District of

Columbia and the Outlying Areas of the United

States, and Associated Areas.

Facility Zip Code

Product: Standard and enhanced editions

Subset Number: 5195

Variable Name: facility_zip _code

able Name. Tacinty_zip _code

Definition: A code used to facilitate the delivery of mail to the

address where the service was rendered.

Type: String

Length: 10 positions or fewer

Value: "53575" is coded for the village of Oregon,

Wisconsin.

Specifications: 1. Zip codes in the range of 53001 – 54999 are valid

Wisconsin zip codes.

2. No punctuation (such as a hyphen) in the zip code

is included.

3. A valid zip code can be in either five- or nine-digit

format.

POV Visit ID

Product: Enhanced edition

Subset Number: 8020 (calculated variable)

Variable Name: pov_visit_id

Definition: A unique visit identification number provided by

BHIP for each service record.

Type: String

Length: 7-13 positions Value: "0415041234"

value. 041304123

Specifications: 1. Each service record is assigned a visit

identification string on the basis of provider organization, patient information, service date, and

physician information.

2. Records with the same visit ID are perceived from

the same office visit.

3. The first two (2) positions represent the reporting year in a two-digit format.

4. The third position indicates the reporting period of the affirmed record

5. The fourth, fifth, and sixth positions consist of a submitter ID number indicating the record source of origin.

6. The rest of the fields consist of a series of randomgenerated alphanumeric characters up to 7 positions.

Provider Patient ID

Product: Enhanced edition

Subset Number: 8030 (calculated variable)

Variable Name: provider patient id

Definition: A "patient" identification number provided by BHIP

for each service record.

Type: String

Length: 7-13 positions Value: "50712345"

Specifications: 1. Each service record is assigned a "patient" identification string on the basis of providerspecific information.

> 2. Records with the same provider patient ID are perceived from the person within a provider organization.

3. The first three positions represent the provider- or submitter-specific information.

4. The rest of the fields consist of a series of randomgenerated alphanumeric characters up to 7 positions.

Common Patient ID

Product: Enhanced edition

Subset Number: 8040 (calculated variable)

common_patient_id Variable Name:

> Definition: A "patient" identification number provided by BHIP

> > for each service record.

Type: String

Length: 7-13 positions Value: "1234567"

Specifications: 1. Each service record is assigned a "patient"

identification string on the basis of patient-specific

information.

2. Records with the same common patient ID are considered services from the same person.

3. Each patient string consists of a series of random-

assigned alphanumeric characters.

4. The length of this field can vary between 5 and 9

characters.

Physician Specialty

Product: Enhanced edition

Subset Number: 8050 (calculated variable) Variable Name: physicain_specialty_code Definition: A physician specialty is any specific branch of

medicine in which a physician may concentrate.

Type: String

Length: 3 positions

Value: "041"

Specifications: 1. Each service record is assigned a physician

specialty code, indicating the provider's primary

area of specialty.

2. The coding definition is consistent with the standard specialty code used by Wisconsin Department of Regulation and Licensing.

Comment

Product: Standard and enhanced editions

Subset Number: 9010

Variable Name: comment_text

Definition: Information, including comments and notes associated

with the record, provided by BHIP.

Type: String

Length: 155 positions or fewer

Value: "Inconsistency between patient gender and diagnosis

code"

Specifications: 1. This field is reserved by BHIP for other reporting

purposes.

2. The value above is an example of a comment. BHIP might include this comment if an

inconsistency was detected between the patient's gender and one of the diagnosis codes, and the inconsistency was not resolved during the editing

process.

Record Structure

This section outlines the record structure and nomenclature of the Standard Edition and the Enhanced Edition POV Public Data Use Files.

Variable-Length Record Structure

The POV Public Use Data File adopts a variable-length record structure for data submission. Variable-length records are those containing fields where the length is neither fixed nor specified. The field length will vary depending on the data being stored. Advantages of applying the variable-length record format include minimizing file size by reducing unnecessary spaces, optimizing the amount of information in a field by not truncating data based on a pre-specified fixed-length format, and optimizing data processing speed and time.

Since the variable-length record structure does not specify individual field lengths and locations for any data elements in a record, it is important to have delimiters to mark or separate distinctive fields as well as records. In the file, two types of delimiters are utilized for distinguishing the beginnings and endings of fields and records.

Field delimiter: The character "|" separates two fields in a

record. The first field of a record only needs a field delimiter between itself and the following field. The last field of a record

needs no field delimiter at its end.

~ Record delimiter: The record delimiter "~" is always placed at

the end of a record to distinguish two

contiguous records. A record delimiter does

not precede the first record.

Missing Data

Elements that do not contain any value are treated as missing data. When the information for a data element field is absent, a null or blank character will be placed between two field delimiters. For example, a record with two missing data elements should look like the following:

XQ200314|M|99231|52.36||Green Bay||WI|...

If the missing information occurs in the last field, a null or blank character should be placed between a record delimiter and a field delimiter. The example below shows that the content in the last field of the record is absent.

WJT007|M|99231|52.36|Dane|Madison|WI|~

Record Layout for Standard Edition Data File

The data elements in a Standard Edition public use file record are listed in Table 3 in order of appearance. The list contains the basic information for an element field: name, type, and length.

Table 3. Record Layout for Standard Edition Public Use Data File

Element Name	Order	Type	Length
POV record ID	1	String	≤13
Patient's gender	2	String	1
Patient's age group	3	String	≤2
Patient's county of residence	4	String	3
Primary payer category code	5	String	2
Secondary payer category code	6	String	2
Service year	7	Num.	4
Service quarter	8	Num.	1
Diagnosis 1 (Principal)	9	String	≤6
Diagnosis 2	10	String	≤6
Diagnosis 3	11	String	≤6
Diagnosis 4	12	String	≤6
Diagnosis 5	13	String	≤6
Diagnosis 6	14	String	≤6
Diagnosis 7	15	String	≤6
Diagnosis 8	16	String	≤6
Procedure code	17	String	5
Procedure charge amount	18	Num.	≤18
Facility name	19	String	≤95
Facility street address 1	20	String	≤55
Facility street address 2*	21	String	≤55
Facility city name	22	String	≤52
Facility state code	23	String	2
Facility zip code	24	String	≤10
Comment	25	String	≤155

If you do not have an Enhanced Edition public use data file, please stop here and skip the next sub-section, "Record Layout for Enhanced Edition Data File."

Record Layout for Enhanced Edition Data File

The data elements in an Enhanced Edition public use file record are listed in Table 4 in order of appearance. The list contains the basic information for an element field: name, type, and length.

Table 4. Record Layout for Enhanced Edition Public Use Data File

Element Name	Order	Type	Length
POV record ID	1	String	≤13
Patient's gender	2	String	1
Patient's age group	3	String	≤2
Patient's county of residence	4	String	3
Primary payer category code	5	String	2
Secondary payer category code	6	String	2
Service year	7	Num.	4
Service quarter	8	Num.	1
Diagnosis 1 (Principal)	9	String	≤6
Diagnosis 2	10	String	≤6
Diagnosis 3	11	String	≤6
Diagnosis 4	12	String	≤6
Diagnosis 5	13	String	≤6
Diagnosis 6	14	String	≤6
Diagnosis 7	15	String	≤6
Diagnosis 8	16	String	≤6
Procedure code	17	String	5
Procedure charge amount	18	Num.	≤18
Facility name	19	String	≤95
Facility street address 1	20	String	≤55
Facility street address 2*	21	String	≤55
Facility city name	22	String	≤52
Facility state code	23	String	2
Facility zip code	24	String	≤10

(Continued)

^{*} If both P.O. Box number and street address are used, P.O. Box number must be placed in street address 2.

Table 4 (Continued...)

Element Name	Order	Type	Length
POV visit ID	25	String	≤13
Provider patient ID	26	String	≤13
Common patient ID	27	String	≤9
Physician specialty code	28	String	≤3
Comment	29	String	≤155

^{*} If both P.O. Box number and street address are used, P.O. Box number must be placed in street address 2.

File Definitions

This section is intended to address technical specifications in organizing datasets as well as other relevant documentation required for the POV Public Use Data Files

Format

To maximize compatibility among various users' systems, all of the datasets in public use data files are formatted as ASCII text without any special characters. Reference documents such as the POV Data User Guide are formatted in Adobe Portable Document Format (PDF), which require users to have Adobe Acrobat Reader installed on their machines before viewing them.

Type and Naming Convention

The POV Public Data Use Files are distributed based on their edition. The file name for a data file consists of three parts: *product edition identifier*, *releasing ID*, and *partition ID*. The file name also includes an extension name, "TXT," indicating that the file is stored in ASCII format. Below is a prototype name for the report file.

[Product Edition Identifier]_[Releasing ID]_[Partition ID].TXT

The *product edition identifier* for a Standard Edition public use file is set to "SE." The *product edition identifier* for an Enhanced Edition public use file is set to "EE." The *releasing ID* is used to indicate the reporting year and period of the data collected and submitted. It consists of three alphanumeric positions. The first two positions are the reporting year in a two-digit year format. The third position is a one-digit number indicating the reporting period of the data set. For instance, "031" means that the data in the Standard Edition public use data file are collected from Year 2003 and Reporting Period 1.

Due to the large size of the released POV data sets, several partitions may need to be created for storage purposes. The partition ID is organized by a set of serial numbers representing the sequence of each partition file. For instance, a data set containing three million records may be split into three partition files, each containing one million records. A partition ID, "P1," is assigned to the first file. Similarly, partition IDs "P2" and "P3" can be assigned to the second and third files.

The following example summarizes how a public use data file is identified and named. BHIP releases a Standard Edition public use data file for Reporting Year 2003 and Period 1. The data set is split into three partition files, due to the

capacity of the storage mechanism. The name of each data file is: SE_031_P1.TXT, SE_031_P2.TXT, and SE_031_P3.TXT.

Hardware and Software Information

The POV public use data files can be run on desktop computers with a CD-ROM or DVD reader, and come in ASCII format.

A set of sample programs and data will be provided along with your CD or DVD for testing purposes. The sample data file often consists of a limited number of records constructed with file definitions used for the regular files in the medium. It gives users a quick view of the record structure and data definition prior to loading any large data file. The sample data may be presented in an ASCII text format, spreadsheet, or other common format.

The sample program, written in SAS language, provides an example of the file or record processing methods for the data. If your version of SAS does not support a long variable name style, please modify the variable name prior to running the program.

The sample data and files are located under the Sample directory in the user's CD or other medium.

Data Use Agreements

Data Use Agreement Requirement

Every user of the POV Public Use Data Files is required to sign a Data Use Agreement. Without a properly signed and notarized data use agreement, a person is prohibited from accessing the POV Public Use Data Files. This document addresses user obligations and commitments regarding the privacy and confidentiality provisions promulgated by Federal and State regulations.

Data Use Restrictions

Chapter 153, Wisconsin Statutes, requires the Department of Health and Family Services (DHFS) to protect the identity of all patients about whom data are collected under this chapter. The Bureau of Health Information and Policy (BHIP) does all it can to assure that the identity of data subjects cannot be inferred. All direct identifiers, as well as any characteristics that might lead to identification of individual patients, are omitted from the public use data files.

Any intentional identification or disclosure of the identity of any person, or any use of the data for any purpose other than analysis and aggregate statistical reporting, violates s.153.45, Wis. Stats., "Release of data," s.153.50, Wis. Stats., "Protection of patient confidentiality," and the data use agreements. Purchasers of the POV Public Use Data Files must complete and have notarized a Data Use Agreement before acquiring the files.

The data or their elements may be re-released by initial purchasers in accordance with HFS 120.31 (3)(d-h), Wis. Admin. Code. In order to re-release them, the initial purchasers must submit a request to DHFS, including the nature of the proposed re-release, the person or entity who will be receiving the data, and the data use agreements. Without receiving written authorization and approval from the Department, no data or their elements can be re-released. In addition, the Department also must receive a signed and notarized Data Use Agreement from the subsequent user.

Civil Liability

Any person, organization, or corporation violating patient confidentiality provisions under s. 153.50 or rules promulgated under s.153.75(1)(a), Wis. Stats., is liable to the patient for actual damages and costs, plus exemplary damages of up to \$1,000 for negligent violation and up to \$5,000 for an intentional violation.

Criminal Sanctions

Whoever intentionally violates data release and data re-release provisions under s.153.45(4), 153.45(5), or rules promulgated under s.153.75(1)(a), Wis. Stats., may be fined not more than \$10,000 or imprisoned for not more than nine months or both.

Citing POV Data

Any statistical reporting or analysis based on the POV Public Use Data Files shall cite the source as the following:

Wisconsin Physician Office Visit Public Use Data Files ([year and quarter of data]). Bureau of Health Information and Policy, Wisconsin Department of Health and Family Services. Madison, Wisconsin. [Date of publication].

Appendix: POV Visit ID

Physician office visits have been addressed in numerous health care research and studies, such as the National Ambulatory Medical Care Survey (NAMCS) and the National Hospital Ambulatory Medical Care Survey (NHAMCS). Consistent with the standard definition commonly used in office visit research, the Wisconsin Physician Office Visit (POV) data program conceptualizes a physician office visit as any direct personal exchange between a patient and a physician for the purposes of seeking ambulatory care and rendering health services.

Ambulatory care means health services provided on an outpatient or clinic basis, in contrast to those provided at home or to individuals who are inpatients. Ambulatory care usually means that "the patient must travel to a location to receive services that do not require an overnight stay" (Centers for Disease Control and Prevention, 2003).

Visits may occur in any place used by a physician as a location for his or her ambulatory practice. POV data collection adopts a place-of-service coding structure stipulated by the Centers for Medicare and Medicaid Services as one of its data submission criteria. The range and type of places of service currently included in POV data collection consist of, but are not limited to, the following locations: office, outpatient department of a hospital, birthing center, military treatment facility, federally qualified health center, community mental health center, mass immunization center, comprehensive outpatient rehabilitation facility, state or local public health clinic, rural health clinic, and independent laboratory.

POV data are collected at the level of the service record: each billable service or procedure provided by a physician constitutes a record. An office visit by a patient to a physician on a particular date may generate one or more service records, depending on the number of physician-provided services that result. To construct service-level information into visits, a set of data categorization methods are employed to integrate data on the patient, physician, service facility location, and provider organization into distinct groups, to identify visit-level information. It is important to note that the "visit" is an estimated result of a unique combination of patient and physician data with a given service date. The data do not distinguish between a single visit and multiple services provided at different times on the same day.

How is a "visit ID" constructed from the POV service records? Based on the general conceptualization of office visits described above, an outpatient office visit must consist of the following four components:

- A patient
- A physician performing at least one procedure
- A provider organization
- A single day

In essence, a grouping procedure is employed to sort and categorize all of the service records submitted in a specific reporting year and period by their patient information, physician identification, provider organization, and service date. Each record is assigned a visit identifier based on the categorization results.

The visit identifier is an arbitrary string consisting of 7 to 13 alphanumerical characters. The visit identifier is considered a calculated variable, also referred to as POV_visit_ID in the POV public use data file. Records with the same visit ID are perceived to be from the same office visit.

Appendix: POV Patient IDs

The Centers for Medicare and Medicaid Services (CMS) provides a broad definition of the patient as an individual receiving "needed professional services that are directed by a licensed practitioner of the healing arts toward maintenance, improvement or protection of health or lessening of illness, disability or pain."

The Wisconsin Physician Office Visit (POV) data program considers a patient to be an individual who receives medical attention, care, or treatment from a trained medical provider or from a medical establishment. This is consistent with the definition of a patient stated in Chapter 153, Wisconsin Statutes: "a person who receives health care services from a health care provider."

For the Enhanced Edition public use data file, DHFS constructs two types of patient-based variables for the purposes of patient-level analyses: provider_patient_ID and common_patient_ID. It is important for data users to be aware that these patient variables do not contain any information allowing users to identify a specific patient, nor a specific visit by a particular patient. Each service record contains both a provider patient ID and a common patient ID.

Provider Patient ID

The provider patient ID is developed based on two provider-specific components: provider organization and patient medical record number. Since each patient in a health care organization usually has a unique medical record number, the patient identifier generated according to this method should provide relatively high accuracy as well as reliability in distinguishing one person from another within the same provider organization.

The provider patient ID is a calculated variable, consisting of an arbitrary string of 7 to 13 alphanumerical characters. Records with the same provider patient ID are perceived to be from the same patient.

Common Patient ID

Alternatively, the common patient ID is formed on the basis of three patient-specific components collected in service records, independent of reporting years and periods. These components are the patient's encrypted case ID, sex, and date of birth. A grouping methodology, similar to that used for creating the POV visit ID, is applied to categorize patient characteristics and generate unique identifiers in order to distinguish patients observed in the POV data.

The common patient ID is also a calculated variable, comprised of an arbitrary string of 7 to 13 alphanumerical characters created in a random fashion. Records with the same common patient ID are perceived to be from the same patient.

Discussion

The POV public use data provides two types of calculated variables intended for patient-level analyses: provider patient ID and common patient ID. Each type has its advantages and limitations. The two patient variables should be considered complementary. The selection of which patient ID is used depends on research questions asked, and the intended use of the data.

The provider patient ID has the following advantages and shortcomings:

- Strong discriminating power for constructing "patients" within a submitting organization
- Less affected by mis-recording problems
- High within-organization consistency over time
- Unable to follow patients switching organizations

The advantages and shortcomings of the common patient ID are as follows:

- Less discriminating power for constructing "patients" within a submitting organization
- Unable to detect mis-recording errors
- Consistency over time
- Able to follow "patients" when they switch organizations

Be aware that both types of patient IDs are not linking variables. They are designed solely for the POV data.